# THE LABOR FORCE

# INTRODUCTION

#### GENERAL

The third series of Population bulletins presents for each State data on the labor force from the Sixteenth Decennial Census of Population, taken as of April 1, 1940. The subjects included are occupation, industry, class of worker, employment status, hours worked in the census week, duration of unemployment, months worked in 1939, and wage or salary income. Statistics are presented for the State by urban and rural resi-

dence, and for large cities.

Related reports.-In the first series of Population bulletins, entitled "Number of Inhabitants," the total population on April 1, 1940, was given for all of the political subdivisions of each State. The second series of Population bulletins, entitled "Characteristics of the Population," presented data for States, counties, all urban places, and metropolitan districts, including condensed labor force statistics on employment status, class of worker, occupation, and industry, as well as data on general population characteristics. The present bulletin gives more detailed data on the labor force for the State and for large cities. The fourth series of Population bulletins, dealing with general population characteristics for States and cities of 50,000 or more, will include statistics on employment status by small age classes and a classification of employed workers by school attendance.

Additional labor force statistics for the United States and for broad regions and geographic divisions will be presented in the publications based upon tabulations of a 5 percent cross-section of the census returns. These publications will give supplementary information on the subjects covered by the present series of bulletins, including statistics on occupation by months worked in 1939, by hours worked in the week of March 24 to 30, 1940, by duration of unemployment, and by education; industry statistics by urban-rural residence; a detailed cross-classification of industry by occupation; wage or salary income data according to color, age, industry, and other characteristics; and duration of unemployment by age. In addition, statistics will be shown on subjects not included in the present series of bulletins, such as Social Security status; usual occupation, industry, and class of worker; household relationships; and characteristics of persons not in the labor force, and of persons for whom employment status was not reported.

Labor force data for families, including statistics on family wage or salary income, number and employment status of workers in the family, employment status of family head, wife, and children, and occupation of family head, by family characteristics, also will appear in a separate publication.

Arrangement of tables.-Tables in the present bulletin are arranged in seven groups according to subjects:

1. Employment status and class of worker. Tables 1 to 9 present data on the size of the labor force and its distribution by employment status, according to class of worker and personal characteristics (sex, age, race, and marital status). They include also comparative data for gainful workers from previous censuses.

2. Occupation. Tables 10 to 14 show the occupational distribution of each employment status group, in combination with

personal characteristics, such as sex, age, race, and marital status.

3. Wage or salary income in 1939. In tables 15 and 16 distributions by wage or salary income in 1939 are given for the experienced labor force by employment status and occupation.

4. Industry. Tables 17 to 20 present the industrial classification of the labor force, by employment status, class of worker, major occupation group, and personal characteristics.

5. Hours worked in the week of March 24 to 30, 1940. Tables

21 and 22 show the number of hours worked during the census

week by employed wage or salary workers.

6. Months worked in 1939. In tables 23 and 24 wage or salary vorkers are classified according to amount of employment in

the year 1939.

7. Duration of unemployment. Tables 25 and 26 present data on duration of unemployment for wage or salary workers seeking work, for new workers, and for persons on public emergency

### DEFINITIONS OF TERMS AND EXPLANATIONS

Areas.-Most of the statistics in this bulletin are presented for the State and for cities of 100,000 or more. In some tables, however, the presentation for cities is restricted to those of 250,000 or more; and in a few tables data are shown only for the State. (See "Availability of unpublished data," p. 8.)

In several tables, statistics are presented for the urban, ruralnonfarm, and rural-farm areas of the State. Urban population, as defined by the Bureau of the Census, is in general that residing in cities and other incorporated places having 2,500 inhabitants or more. In addition, certain densely populated townships or other civil divisions, not incorporated as municipalities, have been classified as urban under special rules. The remainder of the population is classified as rural, and is subdivided into the ruralfarm population, which comprises all rural residents living on farms, without regard to occupation, and the rural-nonfarm population, which comprises the remaining rural population. (For further details for each State, see the first series Population bulletin.)

Personal characteristics.—The labor force statistics in this bulletin have been cross-tabulated, as far as feasible, with certain personal characteristics that are important in the economic analysis of the labor market. A classification by sex appears in all of the tables, and the statistics on most of the subjects are presented separately for whites and nonwhites in areas having a large nonwhite population. In addition, classifications by race, by age, and by marital status are presented in a number of the tables.

Color or race.—Statistics on employment status and occupation for States and all cities of 100,000 or more, and data on employment status and industry for all States, are presented according to three racial groups: White, Negro, and "Other races."

Persons of Mexican birth o: ancestry who were not definitely Indian or of other nonwhite race were returned as white in 1940. Such persons were designated Mexican in 1930 (but not in prior censuses), and were included in the general class of "Other races." The 1930 data for whites and nonwhites published in this bulletin have been adjusted to conform to the 1940 definition.

For Southern States and cities, and for 16 cities in Northern and Western States, the statistics in most of the tables are presented separately for nonwhites, that is, for the total of Negroes, Indians, Chinese, Japanese, and other nonwhite races. The great majority of the nonwhite population consists of Negroes, except in the Pacific States, where there are many

Chinese and Japanese, and in Oklahoma and certain Mountain States, where many of the nonwhites are Indians.

The 16 Northern and Western cities for which data are shown separately for nonwhites are those in which the nonwhite population numbered 50,000 or more, or constituted 10 percent or more of the total population. These cities are: Camden, N. J., Chicago, Ill., Cincinnati, Ohio, Cleveland, Ohio, Columbus, Ohio, Detroit, Mich., Gary, Ind., Indianapolis, Ind., Kansas City, Kans., Kansas City, Mo., Los Angeles, Calif., Newark, N. J., New York, N. Y., Philadelphia, Pa., Pittsburgh, Pa., and St. Louis, Mo.

Age.—The age classification is based on age of the person at his last birthday before April 1, 1940, that is, age in completed years. In the 1940 census tabulations the category "age unknown" has been eliminated. When the age of a person was not reported, it was estimated on the basis of other information on the population schedules, such as marital status, school attendance, employment status, age of other members in the family, etc. The group "age unknown" for the earlier censuses is always included in the summary total "14 years and over" ("15 years and over" in table 9), since it is likely that most of the persons for whom age was not reported were in age classes above this limit.

Marital status.—In the classification by marital status, four groups are shown: Single; married, spouse present; married, spouse absent; and widowed or divorced. A person was classified as "married, spouse present" if the person's husband or wife was reported as a member of the household in which the person was enumerated. The group "married, spouse absent" consists of married persons whose spouses were not living in the same household at the time of the census. The small number of persons whose marital status was not reported and could not be determined from the evidence given on the schedules were classified as single.

Employment status.—The classification by employment status in the 1940 Census of Population was obtained from questions regarding the activity during the week of March 24 to 30, 1940, of all persons 14 years old and over. These questions permitted a classification into two large groups: (a) Persons in the labor force, including those at work, those with a job but temporarily absent from work, those on public emergency work, and those seeking work; and (b) persons not in the labor force. The latter group includes persons reported as engaged in own home housework, those in school, those unable to work, all inmates of penal and mental institutions and homes for the aged, infirm, and needy regardless of their activity during the census week; others not at work and not having a job, not on public emergency work, and not seeking work; and persons for whom employment status was not reported.

The various categories of persons in the labor force, to whom the statistics in this bulletin refer, are defined more precisely below.

Employed (except on public emergency work).—The group classified as employed includes two subgroups: (a) "At work"—persons who worked for pay or profit at any time during the week of March 24 to 30, 1940, in private work or nonemergency Federal, State, or local government work, or assisted without pay on a family farm or in a family business; and (b) "With a job but not at work"—persons not actually at work and not seeking work during the week of March 24 to 30, 1940, but with jobs, businesses, or professional enterprises from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or lay-off not exceeding 4 weeks with definite instructions to return to work on a specific date. The group "Employed (except on public emergency work)" includes not only employees but also proprietors, farmers, other self-employed persons, and unpaid family workers.

Persons with a job but not at work were classified as employed

because the strict definition of the "With a job" category, and the fact that these persons were reported as not seeking work, tended to eliminate all except those who would shortly return to the employment from which they were temporarily absent. Of the total persons employed (except on public emergency work) in the United States, 97.5 percent were at work during the census week, and 2.5 percent were reported as having a job but not at work. In tables 21 and 22, the number of wage or salary workers at work and the number with a job but not at work, are shown separately.

On public emergency work.—This category includes persons who, during the week of March 24 to 30, 1940, were at work on, or assigned to, public emergency work projects conducted by the Work Projects Administration (WPA), the National Youth Administration (NYA), the Civilian Conservation Corps (CCC), or State or local work relief agencies.

In the interpretation of the data for persons on public emergency work, allowance must be made for the misclassification in the census returns of considerable numbers of public emergency workers. The number of persons reported in the census as on public emergency work in the United States was 2,529,606, whereas the number recorded on the pay rolls of the Federal emergency work agencies at about the time of the census was 2,906,196 excluding the NYA Student Work Program, and 3,377,978 including that program. The amount of misclassification varied greatly from State to State. Among the factors that were responsible for the misclassification were confusion on the part of the enumerators and respondents regarding the classification of certain types of public emergency work, and reluctance on the part of some persons to report that they were on emergency work.

The most common type of misclassification was the reporting of emergency workers as "at work" rather than as "on public emergency work." Persons on the NYA Student Work Program were very frequently returned as in school and not in the labor force. There is also evidence that a considerable number of emergency workers were classified as seeking work. The amount of misclassification was somewhat reduced by careful editing of the schedules, but considerable numbers remain improperly classified, especially in the categories: Employed, seeking work, and in school.

Seeking work.—This category represents persons without work of any sort in the week of March 24 to 30, 1940, who were actively seeking work during that week. The group seeking work was subdivided into experienced workers and new workers, the latter being persons who had not previously worked full time for 1 month or more. Persons seeking work for whom a report on work experience was lacking were classified as experienced workers.

Number of unemployed.—The total number of unemployed, as usually defined, includes (1) persons seeking work and without any form of public or private employment, and (2) those on public emergency work programs established to provide jobs for the unemployed. Because of the misclassification of public emergency workers, the census total of these two groups understates the amount of unemployment. More satisfactory figures can be obtained by adding to the census figures for persons seeking work, the number of persons on pay rolls of the Federal and State emergency work agencies at the time of the census. The pay roll figures for Federal emergency work agencies, which are not generally available for areas smaller than States, are published by States in the United States Summary of the second series of Population bulletins.

Comparison of 1940 data on the labor force with previous data for gainful workers.—The 1940 data on the labor force are not directly comparable with the census statistics for gainful workers in 1930 and earlier years because of differences in definition. "Gainful workers" were persons reported as having a gainful

occupation, that is, an occupation in which they earned money or a money equivalent, or in which they assisted in the production of marketable goods, regardless of whether they were working or seeking work at the time of the census. The labor force is defined in the 1940 census on the basis of activity during the week of March 24 to 30, and includes only persons who were at work, with a job, seeking work, or on public emergency work in that week. Certain classes of persons, such as retired workers, some inmates of institutions, recently incapacitated workers, and seasonal workers neither working nor seeking work at the time of the census, were frequently included among gainful workers in 1930, but in general, such persons are not in the 1940 labor force. On the other hand, the 1940 labor force includes persons seeking work without previous work experience, that is, new workers, and persons reported as in the labor force for whom neither occupation nor industry was entered on the schedule. Most of the relatively few new workers at the time of the 1930 and earlier censuses were probably not counted as gainful workers. Likewise, some persons who were actually gainful workers, but for whom neither occupation nor industry was reported, were not included in the gainful worker figures for 1930 and earlier years.

The 1940 labor force figures are restricted to persons 14 years old and over, whereas the number of gainful workers shown in earlier censuses included persons 10 years old and over. The number of workers 10 to 13 years old has become relatively small and no longer justifies the additional burden of enumeration and tabulation necessary to retain the 10-year age limit. In making comparisons between the 1940 labor force data and the gainful worker statistics in earlier census reports, the slight difference in age limits should be taken into consideration. The statistics shown in this bulletin for earlier censuses have been adjusted to exclude those 10 to 13 years old.

Changes in census dates affect the comparison of 1940 data with those for earlier years. In 1900 the census was taken as of June 1, whereas in 1910 it was taken April 15, and in 1920, January 1; in both 1930 and 1940, the census date was April 1. These changes may have had a pronounced effect, especially in agricultural areas, on the size of the group returned as gainful workers and on their occupational and industrial distribution.

Table 2 presents for comparison the number of persons 14 years old and over in the labor force in 1940 and the number of gainful workers 14 years old and over in 1930, 1920, 1910, and 1900; table 7 gives similar comparative data for children 14 to 17 years old in the years 1920 to 1940; table 6 presents data on the 1940 labor force and 1930 gainful workers by age; and table 9 shows the number of females in the labor force in 1940 and the number of female gainful workers in 1930 and 1920 by marital status.

In the census of 1930, an employment status classification was obtained, consisting of seven unemployment classes for gainful workers who were not at work on the last regular working day preceding the enumerator's visit. Inasmuch as these classes are not comparable with the employment status categories of the labor force used in the 1940 census, the 1930 data on unemployment are not shown in this bulletin.

Experienced labor force.—Some of the tables in this volume present data for the experienced labor force, which includes employed persons, persons on public emergency work, and persons seeking work other than new workers.

Class of worker.—A classification of the experienced labor force according to class of worker is given in several tables. These tables show the numbers of wage or salary workers, subdivided into private and government workers; of employers and own-account workers; and of unpaid family workers. Although a similar classification (except for the separation of government workers) has been available from the questions asked in preceding censuses, it has never been published except as a subclassification of persons engaged in agricultural pursuits. It is included in the 1940 census publications because of its value in many types of labor market analyses and in the interpretation of data

on the employment status of the labor force. In table 3 a classification of the experienced labor force by class of worker is presented according to employment status; table 19 presents data on class of worker by industry; and in table 16 the number of wage or salary workers is shown for each occupation.

For employed workers and for persons on public emergency work, the classification by class of worker refers to their current work or job during the week of March 24 to 30, 1940. For experienced workers seeking work it refers to the last job of 1 month or more. The composition of each category is described below:

1. Wage or salary workers. This class consists of persons who, in their current or last job, worked as employees for wages or salary (in cash or kind). It includes not only factory operatives, laborers, clerks, etc., who worked for wages, but also persons working for tips or for room and board, salesmen and other employees working for commissions, and salaried business managers, corporation executives, and government officials. In some of the tables this group is subdivided into: (a) Private wage or salary workers, working for individual employers, private corporations, and for all other employers except governmental agencies, and (b) Government workers, including all employees of Federal, State, or local governments. Persons whose current or latest jobs were on public emergency work are classified as government workers.

In the classification of government workers by industry, which is presented in table 19, small numbers of government workers are sometimes shown as engaged in industries that are not ordinarily carried on by governmental agencies. For some of these workers the class of worker report or the industry classification may have been in error. (See "Reliability of categories with small numbers," p. 8.)

2. Employers and own-account workers. This group consists of persons who, in their current or latest work, operated their own business enterprises. It includes not only the owner-operators of large stores and manufacturing establishments, but also small merchants, independent craftsmen, farmers, professional men, peddlers, and other persons conducting enterprises of their own. It does not include managers paid to operate businesses owned by other persons or by corporations; such workers are classified as wage or salary workers.

Enumerators were instructed to classify as employers persons who employed one or more wage or salary workers in their business enterprises, and to return as own-account workers those who employed no helpers. Examination of the returns revealed, however, that many enumerators had failed to distinguish properly between these two groups, and, therefore, the two categories are combined.

3. Unpaid family workers. This class is composed of persons who assisted without pay on farms or in stores or other enterprises operated by other members of their families. The great majority of unpaid family workers are farm laborers.

Persons in the labor force for whom class of worker was not reported have been included among private wage or salary workers, unless there was evidence to the contrary. In the second series of Population bulletins, the number of employed workers (except those on public emergency work) for whom class of worker could not be determined was shown separately for each State, city, and county. In the entire United States the number of employed persons for whom class of worker could not be determined was 239,081, or 0.5 percent of the total employed.

Occupation and industry statistics—General.—In the 1940 census, inquiries relating to occupation and industry were made for all persons 14 years old and over in the labor force in the census week (March 24 to 30, 1940). For employed persons the occupation and industry questions referred to the current job in the census week, and for experienced workers seeking work, the questions referred to the last job of 1 month or more. Because of this difference in time reference, data for employed workers and for experienced workers seeking work are presented separately in most of the occupation and industry tables in this bulletin. In table 16, however, showing occupation by wage or

salary income, and in table 24, showing industry by months worked in 1939 for wage or salary workers, employed workers (except those on public emergency work) and experienced workers seeking work are combined.

For persons on public emergency work, the occupation and industry questions referred to the work on the public emergency project. For many of these workers, however, the usual occupation and industry, or the occupation and industry of the most recent nonemergency job, were reported. For this reason, no industry statistics are presented in this bulletin for persons on public emergency work, and the occupation statistics are limited to a classification of major groups by sex (table 12).

Comparability of census statistics on occupation and industry with data from other sources.-The statistics on occupation and industry collected by other agencies are not entirely comparable with census data because of differences in the methods of obtaining the information. Occupation and industry classifications based on the reports of employers may be expected to differ considerably from those based on interviews with individuals. Likewise, data obtained from detailed interviews with individual workers may be considerably different from those obtained by the census method of house-to-house enumeration. In census enumeration, the information is frequently obtained from the wives of the workers or from other members of their households who may not be able to describe accurately the worker's occupation and industry. Even when the respondent is entirely familiar with the worker's job, his description is often inexact. Moreover, the enumerators frequently lack the technical knowledge needed to distinguish between closely related occupations and industries and to select the information most essential for accurate classification.

Occupation statistics.—The occupation classification used for the 1940 census contains 451 titles. With very few exceptions these 451 items are convertible to the 327-item Convertibility List of Occupations, which was prepared by the Joint Committee on Occupational Classification (sponsored by the Central Statistical Board and the American Statistical Association) to increase comparability among occupational statistics compiled by various governmental and private sources.

The 451-item occupation classification used for the 1940 census differs from the 534-item classification used for the 1930 census with respect to arrangement and content of titles. In 1930, most of the 534 occupation titles were grouped under a few major industrial headings ("Agriculture," "Forestry and fishing," "Extraction of minerals," etc.), based upon the industry in which the occupation was most commonly followed. In 1940, the 451 occupation titles are grouped into 11 major occupation groups ("Professional and semiprofessional workers," "Craftsmen, foremen, and kindred workers," "Operatives and kindred workers," etc.), regardless of industrial attachment.

The use of the 451-item list is restricted to the presentation of occupation information for employed workers by sex (table 11). In presenting the occupations of male and female experienced workers seeking work, and in the cross-classification of occupation by race, age, marital status, and wage or salary income (tables 10, 13, 14, and 16), intermediate lists of 167 occupations for males and 76 occupations for females are used. All of the occupation data for employed workers were tabulated, however, according to the detailed classification of 451 items. (See "Availability of unpublished data," p. 8.)

The intermediate occupation lists were derived chiefly by combining occupations in the detailed list of 451 occupations that are closely related or numerically small. The intermediate list for males is, with two minor exceptions, completely convertible to the standard intermediate Convertibility List of 99 items which was developed by the same joint committee that prepared the 327-item Convertibility List of Occupations. The

census intermediate list for females and the 99-item standard Convertibility List are convertible to a somewhat broader grouping of occupations.

The intermediate occupation lists used in the 1940 census are uniform for all areas, whereas in previous censuses the condensed list differed from State to State according to the occupational distribution for a given State. Although this change in procedure may result in the loss of some significant information, it is believed that this loss is outweighed by the advantage of having statistics that are completely comparable from area to area.

Occupations of women and children.-It is obvious that in so large a job as that represented by the application of a detailed occupation classification to 50 million workers, there will be some misclassifications, not only those growing out of insufficient information on the part of the persons answering the census enumerator's question, but also misclassifications resulting from carelessness on the part of the enumerator and from clerical errors in the tabulation of the returns. It is believed, however, that the number of misclassifications is too small to have any serious effect on the usefulness of the statistics so far as concerns practically the whole range of the occupation classification. There are a few cases, nevertheless, where relatively small numbers of erroneous returns may produce what might be regarded as a serious misstatement of the facts. These cases are found mainly in the figures which appear on the tabulation sheets for women and children in certain occupations in which women and children are seldom employed.

In many such occupations small numbers of women are actually employed, though mainly under unusual circumstances. A woman returned as a blacksmith, for example, may prove on investigation to be a widow who continues to operate, through hired labor, the blacksmith shop which she inherited from her husband; or, in a few cases, a woman of unusual physique and temperament may be found actually performing the work of a blacksmith. In the process of inspecting the enumerators' returns for women in this occupation, however, it was found more frequently that a careless enumerator had made the entry indicating the occupation of blacksmith on the line for the blacksmith's wife rather than on the line for the blacksmith himself.

In 1930, and likewise in 1920, and to a large extent in 1910, the cards representing questionable returns for women and children were sorted out, checked back to the schedules, and corrected if there was evidence on the schedule that the classification was in error. This, of course, involved a considerable amount of delay and expense and did not reduce very materially the total amount of misclassification in the occupation statistics as a whole. It did, however, remove the most obviously visible misclassifications.

At the time the detailed occupational tabulations were taken up in 1940, there was urgent demand for the occupation figures and other data coming from the same machine tabulations, and the funds available for the completion of these tabulations were limited. It was decided, therefore, to forego, for the most part, the process of checking the questionable cards back to the schedules and to make no attempt to check up occasional returns of unusual occupations for women and children, except in those extreme cases where the occupation seemed to be quite impossible, as, for example, women returned as locomotive engineers. Returns of this latter class were adjusted, and all cases where the questionable item represented considerable numbers were looked up and corrected; but small numbers of borderline cases, such as women returned as blacksmith, were allowed to remain.

The figures for women in these unusual occupations are, therefore, not comparable with those for 1930, and any nominal increase which the figures may show should be regarded as possibly the result of the change in procedure. In particular,

these nominal increases should not be interpreted as indicating an expansion of the field of female activities.<sup>1</sup>

The situation with respect to both the returns and the tabulated data for children in occupations unusual for children is practically the same as that just outlined with respect to the data for women in unusual occupations. The same cautions should be expressed with respect to the use of these figures as outlined above with respect to the use of the figures for women in unusual occupations. In particular, a nominal increase in the number of children in any age group in a given occupation, especially if the total number is small, should not be interpreted as necessarily indicating an increase in the number of children actually following that occupation.<sup>2</sup>

Industry statistics.—Because of the increased importance of industry as a classification of the labor force, the volume of industry statistics presented for the 1940 census is considerably greater than for earlier censuses. In 1930, industry statistics published for States and principal cities were limited to a condensed classification, by sex. In the 1940 census, on the other hand, industry statistics for these areas include classifications by race, age, employment status, class of worker, major occupation group, hours worked in the week of March 24 to 30, 1940, months worked in 1939, and duration of unemployment.

The industry classification used in the 1940 census contains 132 items. This classification is a condensation of the 1,411 titles in the Standard Industrial Classification, which has been adopted by most governmental agencies. It was prepared for use in classifying industry returns from workers or members of their families, by the Joint Committee on Occupational Classification, in cooperation with the Committee on Industrial Classification which was sponsored by the Central Statistical Board. For most of the industries the classification is not directly comparable with the 128-item industry classification used in the 1930 census.

The use of the 132-item list of industries is restricted to the presentation of industry data for employed workers (except those on public emergency work) and experienced workers seeking work, by sex and color (table 17). An intermediate list of 82 industries is used in presenting classifications of industry by race, age, class of worker, major occupation group, hours worked in the week of March 24 to 30, 1940, months worked in 1939, and duration of unemployment (tables 18, 19, 20, 21, 24, and 26). This intermediate list was derived chiefly by combining industries in the 132-item list which are closely related or numerically small. All of these data, however, were tabulated in terms of the complete list of 132 industries. (See "Availability of unpublished data," p. 8.)

Coverage of industry classifications "Government" and "Domestic service."—The industry classification "Government (not elsewhere classified)" does not include all persons employed by governmental agencies. Persons are included in this classification only if they were engaged in activities that are peculiarly governmental functions. Government employees who were engaged in activities that are commonly performed by employees of private enterprises are included in the industry classification in which their activities fell. For example, a tax collector is

included in the industry classification "Government," but a lineman employed by a municipally owned power plant is classified in the category "Electric light and power." The total number of persons employed by governmental agencies, therefore, cannot be obtained from the industry classification, but such a figure is available from the class of worker data presented in tables 3 and 19.

The industry group "Domestic service" is somewhat more inclusive than the major occupation group "Domestic service workers," which is limited to "Housekeepers, private family," "Laundresses, private family," and "Servants, private family." The industry classification "Domestic service" includes not only these workers but also persons in occupations such as practical nurse, chauffeur, and gardener, if they were employed by private families.

Comparison of occupation and industry statistics for 1940 with data from earlier censuses.—No comparisons of the 1940 census data on occupation and industry with similar data from the 1930 and earlier censuses are included in this bulletin. Such comparisons are complicated by four important considerations.

In the first place, gainful workers, the group for which occupation and industry statistics were presented in previous censuses, are not directly comparable with the 1940 labor force. (See "Comparison of 1940 data on the labor force with previous data for gainful workers," p. 3.)

Second, the detailed occupation and industry data shown here do not cover the entire labor force. For persons on public emergency work, no data on industry are presented, and the occupation classification is limited to major occupation groups.

Third, the occupations and industries reported for 1930 and previous years did not necessarily apply to the current jobs of employed workers, or to the latest jobs of unemployed workers. Consequently, it is difficult to determine to what extent the figures for these earlier censuses may represent usual rather than current or latest occupations and industries. In the 1940 census, on the other hand, the inquiries were designed to obtain current occupation and industry for employed workers and latest occupation and industry for persons seeking work.

Finally, the 1940 classifications of occupation and industry differ from those used in previous censuses. Studies are now being made of the relationships between the 1940 and 1930 classifications. Comparison must await the results of these studies, showing the items that correspond in the classifications for the two censuses, indicating the probable extent of difference in other items, and listing the items that are not comparable. These studies will facilitate the comparison of 1940 occupation and industry statistics with data from earlier censuses.

Wage or salary income. - In 1940, inquiries concerning income were made for the first time in the history of the Population census, in order to provide statistics regarding the adequacy of employment and the economic well-being of the people. All persons 14 years old and over (except inmates of specified institutions) were asked to report the amount of money wage or salary income received in 1939. (Those who received over \$5,000 were required only to report that they had received more than that amount.) Persons 14 years old and over were also asked to report whether they had received \$50 or more from sources other than money wages or salaries in 1939. This comparatively small amount was chosen in order to identify those persons whose incomes, for all practical purposes, were limited to receipts from wages or salaries. A question regarding the exact amount of nonwage income was not included because of the very considerable additional burden of enumeration that such a question would have entailed.

Money wage or salary income as defined for the purposes of the 1940 census includes all money received by persons as compensation for work or services performed as *employees*, including commissions, tips, piece-rate payments, bonuses, etc., as well as receipts commonly referred to as wages or salaries. Enumerators

<sup>1</sup> Occupations for which the data for females should be interpreted with special caution include most of the occupations in the major group "Craftsmen, foremen, and kindred workers"; most of the 41 specified classes of operatives and kindred workers listed first in the major group "Operatives and kindred workers listed first in the major group "Protective service workers"; and the 8 specified groups of laborers listed first in the major group "Laborers, except farm and mine" in table 11. For example, many of the females listed as skilled "Machinists" or "Mechanics or repairmen (not elsewhere classified)" actually were semiskilled machine operators; and many of the females listed as "Painters (construction and maintenance)" were interior decorators.

Occupations that are unusual for children under 18 years of age include many occupations in the major groups "Professional and semiprofessional workers" and "Farmers and farm managers"; and most of the occupations in the major groups "Proprietors, managers, and officials, except farm," "Craftsmen, foremen, and kindred workers," and "Protective service workers." Most of the children returned as craftsmen or professional workers were doubtless, in fact, apprentices or assistants.

were instructed not to consider as wage or salary income receipts from business profits, fees, travel reimbursements, sale of crops, unemployment compensation, etc., nor compensation in forms other than money, such as meals, lodging, clothing, fuel, etc.

The data on wage or salary income are summarized in table 15 for the State, for urban and rural areas, and for each city of 100,000 or more. Table 15 also presents data for persons on public emergency work in the census week. Statistics on wage or salary income in 1939 by occupation and sex are presented in table 16 for persons who were in the labor force in the week of March 24 to 30, 1940, except new workers and persons who were on public emergency work. In order to show the relationship between income and amount of employment, wage or salary income data are presented not only for the total of these workers in each occupation, but also for the group who worked 12 months (50 to 52 weeks) in 1939. The latter group is more homogeneous than the total, since it represents persons who were employed substantially full time during the year.

In occupational groups containing many employers, own-account workers, or unpaid family workers, a large proportion of the workers are classified as having received less than \$100 in wage or salary income, since for these classes of workers receipts other than wages or salaries are the principal source of income. Because of mechanical limitations, it was impossible in this tabulation to separate persons who received no wage or salary income from those who received \$1 to \$99. Table 16 shows, however, the number of wage or salary workers (except those on public emergency work) in each occupation as of the census week, and thus indicates the size of the group normally receiving compensation in the form of wages or salaries.

The majority of the persons for whom wage or salary income was not reported probably had no wage or salary income in 1939, since available evidence indicates that most of these persons were employers, own-account workers, and unpaid family workers.

The wage or salary income questions on the population schedule referred to the calendar year 1939, while the employment status, class of worker, and occupational classifications referred to the week of March 24 to 30, 1940. The number of persons who shifted from one occupation to another during 1939 and early 1940 is probably not great enough to distort the income distributions for the majority of occupations, but there is a possibility that substantial shifts may have occurred in particular occupations in some areas. Because of the rapid turnover of emergency project employment the difference in time reference probably is most important in connection with the wage or salary income distribution of persons on public emergency work. A considerable proportion of the wage or salary income reported by persons on public emergency work was derived from private employment.

Two important factors may have operated to make for inaccurate reporting of the data on wage or salary income. First, persons who received their compensation in many separate installments of irregular amounts may not have been able to determine accurately the total amount received. Second, some informants who replied to the census inquiries for the whole family undoubtedly did not know the precise amount of wage or salary income received by each member. Nevertheless, the statistics present a reasonably accurate picture of the amount and distribution of wage or salary income received in 1939.

Hours worked during the week of March 24 to 30, 1940.—The question on hours of work in the 1940 census pertained to the number of hours worked during the week of March 24 to 30, 1940, by persons who were at work (except on public emergency work) during that week. The data on hours of work for wage or salary workers at work are presented in table 22, and in table 21 similar data are given for each industry.

The groupings of hours worked that appear in these tables are designed to show the length of the usual work week in each industry at the time of the census, and the proportions of workers

whose hours were above or below the typical number. Since 40 hours and 48 hours were standards for full-time work in many industries, persons who reported exactly these numbers of hours are shown separately. The proportions of persons who worked less than the most common number of hours are indicative of the prevalence of part-time employment in the various industries at the time of the census. It should be borne in mind, however, that the standards of full-time work vary extensively even within a single industry, and that many persons working part time do not desire more work.

Data on hours of work have not been tabulated for persons other than wage or salary workers because these data are less significant and less reliable than those for wage or salary workers. Employers, own-account workers, and unpaid family workers do not ordinarily follow regular schedules of work, and it is often difficult, especially for professional men working on their own account, to determine the number of hours devoted to their occupations or businesses during a week.

Months worked in 1939.—In addition to data on employment status in the census week, information was obtained in the 1940 census on amount of employment in 1939. All persons 14 years old and over at the time of the census, except inmates of certain institutions, were asked to report the number of weeks worked for pay or profit, including public emergency work, or at unpaid family work. For periods of part-time work, the report was to be made in terms of equivalent full-time weeks, a full-time week being defined as the number of hours locally regarded as full time for the given occupation and industry. Paid vacations or other absences with pay were included in the number of weeks worked.

The returns for weeks worked in 1939 have been converted into months in the tables in this bulletin, because a large proportion of the reports were only approximate, and did not represent valid statements of the precise number of weeks of work. The groupings of months worked that are used in this bulletin are listed below with their equivalents in terms of the original reports of weeks worked.

Number of months worked Reported number of weeks
worked
Without work in 1939

Without work in 1939	0	we	eks	<b>i.</b>
With work in 1939:				
Less than 3 months	1	to	10	weeks.
3 to 5 months1	1	to	$^{23}$	weeks.
6 to 8 months2	4	to	35	weeks.
9 to 11 months	86	to	49	weeks.
12 months	60	to	52	weeks.

The distribution of wage or salary workers by number of months worked in 1939 is presented in table 23 by employment status during the week of March 24 to 30, 1940. In table 24 the distribution by number of months worked in 1939 is presented for wage or salary workers (except those on public emergency work), classified according to the industry to which they were attached as of the census week.

Data on months worked in 1939 were not tabulated for employers, own-account workers, and unpaid family workers because these figures are less significant and less reliable for such workers than for wage or salary workers.

For industries in which there is much part-time or casual em-

<sup>3</sup> This lack of precision was evidenced by a marked tendency for enumerators to report weeks worked in multiples of 4 weeks, indicating that they had determined the approximate amount of employment in terms of months, and multiplied the number of months by four to obtain the number of weeks. In converting the returns to months for purposes of publication, it was necessary to take account of the slight error that resulted from the enumerators' procedure of multiplying the number of months by four instead of by four and one-third. The class intervals were so chosen that the weekly equivalent of any given number of months would always fall in the same interval, whether the conversion was made on the basis of four or four and one-third weeks per month. Thus, 9 months might be figured incorrectly as 36 weeks or correctly as 36 weeks, but both figures fall in the group 36 to 49 weeks, which is equivalent to 9 to 11 months. In the case of 12 months, however, this procedure was not used, since it was apparent that enumerators had seldom used 48 weeks as the equivalent of 12 months.

ployment, and for seasonal industries, the data on months worked should be interpreted with care. Accurate reports were frequently unobtainable for persons who worked intermittently at many separate times during the year. In many cases the information was not obtained from the worker himself, but from a relative or other member of the household who may not have been able to report accurately the amount of employment in 1939. Moreover, the classifications according to employment status, class of worker, and industry refer to the week of March 24 to 30, 1940, nearly 3 months after the calendar year to which the data on months worked refer. The number of persons who shifted from one industry to another during 1939 and early 1940 was probably not great enough to distort the distribution by months worked for the majority of industries, but substantial shifts may have occurred in particular industries in some areas. Some of the persons for whom data on months worked in 1939 are presented were not in the labor force throughout that year. Because of the rapid turnover of emergency project employment the difference in time reference probably is most important in connection with the data on months worked for persons on public emergency work.

Duration of unemployment.—Data on the duration of unemployment were obtained for persons who were seeking work or on public emergency work in the census week. The duration of unemployment represents the length of time (up to March 30, 1940) during which these persons had been seeking work or working on public emergency projects. For persons who had previously worked at private or nonemergency government jobs, duration of unemployment was defined as the length of time since the end of the last full-time private or nonemergency government job of 1 month or more. For persons who had never worked for 1 month or more at such a job (and for persons who had been out of the labor force for considerable periods of time), enumerators were instructed to report the length of time since the person last began to seek work.

Statistics on duration of unemployment were obtained also in the 1930 census. These statistics, however, are not closely comparable with the 1940 figures because of differences in the definitions of the groups of workers to which the figures refer.

Duration of unemployment was reported on the 1940 census schedules in terms of weeks, but in this bulletin the data are presented in terms of months. The classes of duration of unemployment that are used, and their equivalents in terms of weeks as reported, are listed below.

# Duration in months Reported duration in weeks

Less than 1 month	Under 3 weeks.
1 month	3 to 6 weeks.
2 months	7 to 10 weeks.
3 months	
4 and 5 months	
6 to 8 months	
9 to 11 months	36 to 49 weeks.
12 to 23 months	
24 to 59 months	100 to 249 weeks.
	250 or more weeks.

The statistics on duration of unemployment are presented in table 25 for wage or salary workers seeking work, for new workers, and for persons on public emergency work. In table 26 similar data are given for wage or salary workers seeking work, by industry. The statistics for new workers and for persons on public emergency work are not so reliable as those for experi-

enced workers seeking work. For new workers the duration of unemployment is intended to represent the length of time since the person began to seek work, which is less definite and more difficult to report accurately than the length of time since the end of the last job. A large proportion of the persons on public emergency work did not report duration of unemployment, and it is probably unsafe to assume that the periods of unemployment of those who failed to report were similar to those which were reported.

Statistics on duration of unemployment were not tabulated for employers, own-account workers, and unpaid family workers, partly because the information is less significant for these classes, partly because comparatively few of them were unemployed, and partly because the data are less reliable than for wage or salary workers.

Reliability of categories with small numbers.—Categories with small numbers should be used with care, since they may in part represent undetected errors of enumeration. This caution applies especially to occupation and industry classifications that include small numbers of persons. (See "Comparability of census statistics on occupation and industry with data from other sources" and "Occupations of women and children," p. 5.) A few persons may be shown in this bulletin as employed in occupations or industries that are unusual for the area in which they are shown. Such cases often represent persons who reside in one locality and work in another,

#### AVAILABILITY OF UNPUBLISHED DATA

Because of limited funds for publication, it has been necessary to omit some of the statistics that were tabulated. These statistics can be made available for the cost of preparing and reproducing them. Requests for these data, addressed to the Director of the Census, Washington, D. C., will receive a prompt reply, including an estimate of the cost of preparing the figures.

All of the statistics in this bulletin are available for the State and for each city of 100,000 or more, although some of the data are published only for the cities of 250,000 or more or for the State total. In addition, the statistics on occupation and income, shown in tables 11, 13, 14, and 16, are available for urban, rural-nonfarm, and rural-farm areas of the State.

All of the statistics on occupation for employed workers are available according to the detailed classification of 451 occupations, although only intermediate lists are published in tables 10, 13, 14, and 16. The data for persons seeking work, on the other hand, were tabulated according to the intermediate lists of occupations and cannot be obtained in greater detail. All of the statistics by industry, both for employed workers and for those seeking work, are available according to the detailed classification of 132 industries shown in table 17, although a condensed classification appears in tables 18 to 21, 24, and 26.

In the tables on wage or salary income and months worked in 1939 (tables 15, 16, and 24), the data for employed workers and persons seeking work have been combined; separate figures for these two employment status categories are available. The statistics on marital status by occupation, which are presented for females only in table 14, are available also for males; and the figures on major occupation group by industry, presented for employed workers only in table 20, are available for experienced workers seeking work.

Finally, statistics on class of worker according to occupation were tabulated, but only the number of wage or salary workers in each occupation is published, in table 16. The unpublished tabulation shows the numbers of private wage or salary workers, government workers, employers and own-account workers, and unpaid family workers, by sex, employment status, and occupation (according to the detailed occupation list for employed workers and the intermediate lists for experienced workers seeking work), for the State, urban, rural-nonfarm, and rural-farm areas, and each city of 100,000 or more.

<sup>4</sup> For a statement of the reasons for the conversion to months and the procedures used, see "Months worked in 1939," p. 7. In addition, there was evidence of a tendency to report very long durations of unemployment in multiples of 50 weeks, indicating that some enumerators had calculated the number of weeks by multiplying a given number of years by 50. To take account of this tendency, the classes designated as 12 to 23 months, 24 to 59 months, and 60 or more months, representing 1, 2 to 4, and 5 or more years, respectively, were so designed that the weekly equivalent of any given number of years would always fall in the same interval, whether the conversion was made on the basis of 50 or 52 weeks per year.